



## Terrell Creek Upper Mainstem

### LAND USE MANAGEMENT PRIORITY: PROTECTION

#### **Watershed Characterization Results from the 2007 Pilot Study:**

##### *This watershed's ability to help maintain / improve water quality:*

The Terrell Creek Upper Mainstem watershed is a large area with many low-gradient stream channels and a high percentage of wetlands, which are effective at removing nitrogen, bacteria from septic systems, and other pollutants that would otherwise flow into downstream area. There are numerous septic systems and a dairy farm located in this watershed, so the wetlands and streams here are especially important for protecting the water quality of the Bay.

##### *This watershed's ability to maintain / improve natural patterns of surface and groundwater flow:*

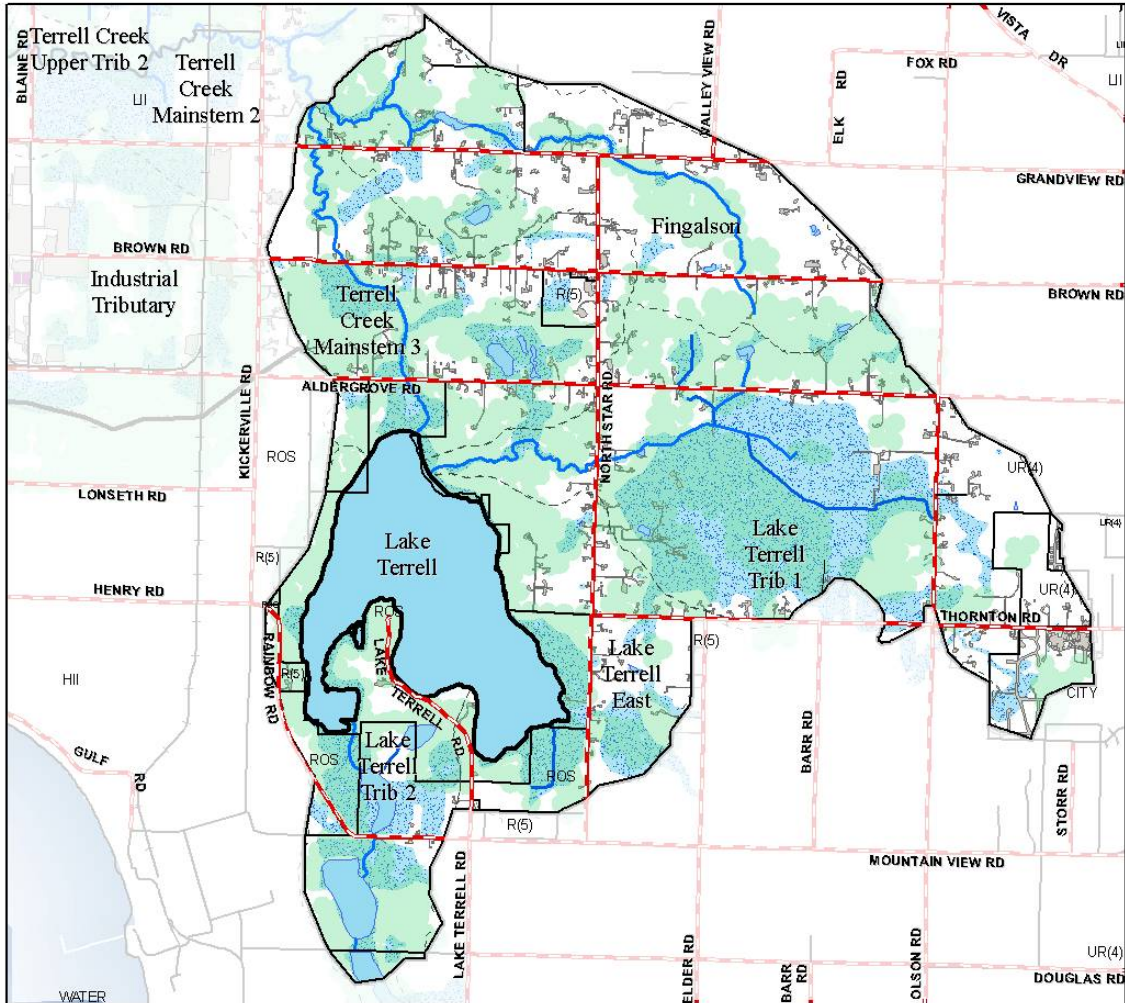
Portions of the watershed have highly permeable underlying soils and geology, so water is able to infiltrate into the ground instead of running off and potentially causing flooding problems. Also, the watershed contains several large wetlands that can store substantial amounts of water during periods of heavy or prolonged rain, which protects against flooding and recharges groundwater. The large swamp that is bordered by Aldergrove, Olson, Thornton, and North Star roads is especially important for water storage and groundwater recharge.

#### **Important Wildlife Features:**

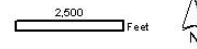
The watershed is important for wildlife habitat because of its pattern, or mosaic, of diverse habitats (fields, stands of trees, and shrub-dominated areas). The watershed contains streams, wetlands, large forest patches, and fields that provide cover, foraging, and breeding areas for a variety of mammals, birds, fish, amphibians and other fauna. Habitats of particular importance include the salmon-bearing Terrell and Fingalson creeks, and the large swamp bordered by Aldergrove, Olson, Thornton, and North Star roads, which provides important breeding habitat for amphibians. The watershed also contains Lake Terrell Game Refuge, which is owned by the Department of Fish and Wildlife.

#### **Anticipated Challenges:**

According to the 2007 pilot study, the watershed has a low-to-moderate potential of future development. The majority of the watershed is zoned either protected open space or rural residential, which allows only one dwelling per five acres minimum. In general, the Terrell Creek Upper Mainstem watershed is very important for providing wildlife habitat and helping to protect the water quality and water flows in the entire Birch Bay Watershed. Minimizing development and focusing habitat restoration and protection in this area will be an important component of protecting the existing quality of the Birch Bay area in the future.



Terrell Creek Upper Mainstem: Natural Infrastructure and Development



Questions or comments? E-mail us at [pgill@co.whatcom.wa.us](mailto:pgill@co.whatcom.wa.us) or call 360-676-6907

### What We Found: The Land Cover Analysis by the Numbers

Feature	2008	1955
Impervious Surface	4 %	2 %
Tree Cover	35 %	38 %
Wetland cover	30 %	
Stream miles	10.71 mi	
Subwatershed Area	4820 Ac	

\*Percentage of Subwatershed

Note: Areas of tree cover and wetland cover may overlap

Note: Wetland data unavailable for 1955

